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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,383	06/15/2001	Richard T. Williams	E-2038	8311

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JOHN F. A. EARLEY III
THE COMMONS AT VALLEY FORGE EAST
1288 VALLEY FORGE ROAD
P.O. BOX 750
VALLEY FORGE, PA 19482-0750

EXAMINER

OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 08/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/882,383

Applicant(s)

WILLIAMS, RICHARD T.

Examiner

Marianne S. Ocampo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a). Claim 2 recites the limitation "the flexible resilient tube member" in line 1. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, the examiner has considered that a typographical error has been made, and that the word "member" should have been written as "means".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1 – 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Offer (US 3,776,384).

5. Concerning claim 1, Offer discloses a pressure vessel (i.e. pressurized vessel, 1) comprising a top wall (5), a bottom wall (bowl end portion of 3) and a sidewall (upper end of bowl 3) between the top wall and the bottom wall and a chamber (48) formed by the walls (3, 5), and inlet means (15) extending through one of the walls (bottom end of 3) for introducing fluid into the pressure vessel (1), an outlet means (17) extending through one of the walls (top wall, 5) for removing fluid from the vessel (1) and the outlet means including an outlet port, a pressure gradient member (in the form of a filter element, 27) located within the chamber (48) of the pressure vessel (1) through which fluid passing through the pressure vessel (1) flows as the fluid passes through the vessel (1) and the pressure gradient member including an outlet port (defined by a perforated central tube of the filter element and an opening in a top end cap (31) of the filter element 27) and a flexible resilient tube means (41) extending between the outlet port of the pressure gradient member (27) and the outlet port (47, 17) of the outlet means (17) for mounting the pressure gradient member within the chamber (48) formed by the walls (3, 5) of the pressure vessel and for connecting the outlet port of the pressure gradient member (27) to the outlet port (47) of the outlet means (17), as in fig. 1 and in cols. 1 – 2.

6. With regards to claim 2, Offer also discloses the flexible resilient tube means/member (41) comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1.

7. Regarding claim 3, Offer further discloses the pressure gradient member (27) comprising a cartridge, particularly a filter cartridge (27), as in fig. 1 and col. 1.

8. With regards to claim 4, Offer also discloses the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), and the pressure gradient member (27) comprising a cartridge, particularly a filter cartridge (27), as in fig. 1 and col. 1.

9. With respect to claim 5, Offer discloses a pressure vessel (i.e. pressurized vessel, 1) comprising a top wall (5), a bottom wall (bowl end portion of 3) and a sidewall (upper end of bowl 3) between the top wall and the bottom wall and a chamber (48) formed by the walls (3, 5),

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and inlet means (15) extending through one of the walls (bottom end of 3) for introducing fluid into the pressure vessel (1), an outlet means (17) extending through one of the walls (top wall, 5) for removing fluid from the vessel (1) and the outlet means including an outlet port, a pressure gradient member (in the form of a filter element, 27) located within the chamber (48) of the pressure vessel (1) through which fluid passing through the pressure vessel (1) flows as the fluid passes through the vessel (1) and the pressure gradient member including an outlet port (defined by a perforated central tube of the filter element and an opening in a top end cap (31) of the filter element 27) and a flexible resilient tube means (41) extending between the outlet port of the pressure gradient member (27) and the outlet port (47, 17) of the outlet means (17) for mounting the pressure gradient member within the chamber (48) formed by the walls (3, 5) of the pressure vessel and for connecting the outlet port of the pressure gradient member (27) to the outlet port (47) of the outlet means (17), and for providing a substantially uniform support of a load on the pressure gradient member (27) created by a side impact to the vessel (1), as in fig. 1 and in cols. 1 - 2.

10. Concerning claim 6, Offer also discloses the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1 and cols. 1 - 2.

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11. Regarding claim 7, Offer further discloses the pressure gradient member (27) comprising a cartridge, particularly a filter cartridge (27), as in fig. 1 and col. 1.

12. With regards to claim 8, Offer also discloses the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), and the pressure gradient member (27) comprising a cartridge, particularly a filter cartridge (27), as in fig. 1 and col. 1.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (US 5,230,812) in view of Offer (384).

15. With regards to claim 1, Williams discloses a pressure vessel (11) comprising a top wall (13, 21), a bottom wall (27, 15) and a sidewall (23, 29, defined both by the cover 13 and bowl 15) between the top wall (21) and the bottom wall (27), and a chamber formed by the walls (21, 23, 29, 27), and inlet means (67) extending through one of the walls (top wall 21) for introducing fluid into the pressure vessel (11), an outlet means (69) extending through one of the walls (top wall, 21) for removing fluid from the vessel (11) and the outlet means including an outlet port (81), a pressure gradient member (in the form of a cartridge filter, 101) located within the chamber of the pressure vessel (11) through which fluid passing through the pressure vessel (11) flows as the fluid passes through the vessel (11) and the pressure gradient member (101) including an outlet port (defined by a tubular end portion having an opening in a top end cap of the filter 101), as in figs. 1 – 2 and cols. 2 - 4. Williams fails to disclose a flexible resilient tube means extending between the outlet port of the pressure gradient member (101) and the outlet port (81) of the outlet means (69) for mounting the pressure gradient member (101) within the chamber formed by the walls of the pressure vessel (11) and for connecting the outlet port of the pressure gradient member (101) to the outlet port (81) of the outlet means (69). Offer teaches a similar pressure vessel (1) as Williams, wherein the pressure vessel of Offer also having a flexible resilient tube (41) extending between the outlet port (an opening in a top end cap 31) of the pressure gradient member (27) and the outlet port (47) of the outlet means (17) for mounting

the pressure gradient member (27) within the chamber (48) formed by the walls (5, 3) of the pressure vessel (1) and for connecting the outlet port of the pressure gradient member (27) to the outlet port (47) of the outlet means (17), as in fig. 1 and cols. 2 - 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the sealing means of Williams which provides both the functions of mounting a pressure gradient member within a pressure vessel and connecting outlet port of the gradient member and outlet port of the outlet means of the vessel, in lieu of the flexible resilient tube embodiment taught by Offer, in order to provide an alternative sealing, mounting and connection means which provides not only an adequate seal and also provides a mounting means which can be adjusted in length axially within the chamber to accommodate different specific types and sizes of pressure vessels, as in cols. 1 - 2.

16. Concerning claim 2, Williams as modified by Offer, also teaches the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1 of Offer. The same motivation used in claim 1 above, is applied here.

17. Regarding claim 3, Williams further discloses the pressure gradient member (101) comprising a cartridge, particularly a filter cartridge (101), as in fig. 2 and col. 4.

18. With regards to claim 4, Williams as modified by Offer, also teaches the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1 of Offer, and Williams has already disclosed the pressure gradient member (101) comprising a cartridge, particularly a filter cartridge (101), as in fig. 2. The same motivation used in claim 1 above, is applied here.

19. Regarding claim 5, Williams discloses a pressure vessel (11) comprising a top wall (13, 21), a bottom wall (27, 15) and a sidewall (23, 29, defined both by the cover 13 and bowl 15) between the top wall (21) and the bottom wall (27), and a chamber formed by the walls (21, 23, 29, 27), and inlet means (67) extending through one of the walls (top wall 21) for introducing fluid into the pressure vessel (11), an outlet means (69) extending through one of the walls (top wall, 21) for removing fluid from the vessel (11) and the outlet means including an outlet port (81), a pressure gradient member (in the form of a cartridge filter, 101) located within the chamber of the pressure vessel (11) through which fluid passing through the pressure vessel (11) flows as the fluid passes through the vessel (11) and the pressure gradient member (101) including an outlet port (defined by a tubular end portion having an opening in a top end cap of the filter 101), as in figs. 1 - 2 and cols. 2 - 4. Williams fails to disclose a flexible resilient tube

means extending between the outlet port of the pressure gradient member (101) and the outlet port (81) of the outlet means (69) for mounting the pressure gradient member (101) within the chamber formed by the walls of the pressure vessel (11) and for connecting the outlet port of the pressure gradient member (101) to the outlet port (81) of the outlet means (69) and for providing substantially uniform support for a load on the pressure gradient member created by a side impact to the pressure vessel. Offer teaches a similar pressure vessel (1) as Williams, wherein the pressure vessel of Offer also having a flexible resilient tube (41) extending between the outlet port (an opening in a top end cap 31) of the pressure gradient member (27) and the outlet port (47) of the outlet means (17) for mounting the pressure gradient member (27) within the chamber (48) formed by the walls (5, 3) of the pressure vessel (1) and for connecting the outlet port of the pressure gradient member (27) to the outlet port (47) of the outlet means (17), as well as capable of providing substantially uniform support of a load on the pressure gradient member created by a side impact on the vessel (1), as in fig. 1 and cols. 2 - 4. It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the sealing means of Williams which provides both the functions of mounting a pressure gradient member within a pressure vessel and connecting outlet port of the gradient member and outlet port of the outlet means of the vessel, in lieu of the flexible resilient tube embodiment taught by Offer, in order to provide an alternative sealing, mounting and connection means which provides not only an adequate seal and also provides a mounting means which can be adjusted in length axially within the chamber to accommodate different specific types and sizes of pressure vessels, as in cols. 1 -2.

20. Concerning claim 6, Williams as modified by Offer, also teaches the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1 of Offer. The same motivation used in claim 1 above, is applied here.

21. Regarding claim 7, Williams further discloses the pressure gradient member (101) comprising a cartridge, particularly a filter cartridge (101), as in fig. 2 and col. 4.

22. With regards to claim 8, Williams as modified by Offer, also teaches the flexible resilient tube means/member comprising a flexible resilient tube (41) having a first (lower) end portion and a second (top) end portion wherein the first (lower) end portion is mounted over the outlet port (opening defined by the top end cap 31 and central tube 39) of the pressure gradient member (27) and the second (top) end portion being mounted over the outlet port (47) of the outlet means (17), as in fig. 1 of Offer, and Williams has already disclosed the pressure gradient member (101) comprising a cartridge, particularly a filter cartridge (101), as in fig. 2. The same motivation used in claim 1 above, is applied here.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 6,171,492 B1 (Hedgepeth et al.), 3,696,932 (Rosenberg), 3,002,870 (Belgarde et al.) and 3,672,510 (Saito et al.).

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (703) 305-1039. The examiner can normally be reached on Mondays to Fridays from 8:00 A.M. to 4:30 P.M..

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

25. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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MSO

M.S.O.

August 24, 2002

M Savage

**MATTHEW C. SAVAGE
PRIMARY EXAMINER**